

Work Order ID 165718

Monday, August 28, 2017 12:54:12 PM

165718

Page 1

Item ID: D4716-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Duct Hose
Start Date: 8/29/2017 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 9/13/2017 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan: DAS 21 9-89 Date: AUG 30 2017 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4716	A								
100		0.00					<u>12</u>	<u>DAS 13 9-89</u>	<u>DOB</u>
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>3767</u> MANUFACTURE AS PER DWG D4716 Supplier: CUSTOM DUCTS Certificate of conformity is required								<u>AUG 30 2017</u>
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.24							
Packaging							<u>12x SP 17-9-19</u>		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 165718

Monday, August 28, 2017 12:54:12 PM

165718

Page 2

Item ID: D4716-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Duct Hose
Start Date: 8/29/2017 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 9/13/2017 Req'd Qty: 12.00 ***12*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- All purchased or subcontracted products	0.00							
120									
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location 57221B	0.00							
130									
Packaging	Memo	0.12							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.20							
Quality Control									

(12) 12.09.20 PD

12 SEP 20 2017 DAS 6

17/9/2017

SEP 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Picklist Print

Monday, August 28, 2017 12:54:14 PM

Page 1

Work Order ID: 165718

165718

Parent Item: D4716-5

D4716-5

Parent Item Name: Duct Hose

Start Date: 8/29/2017

Required Date: 9/13/2017

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 12.11.08 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4716-5P		Purchased	No			110	Each	0.0000	1	12			
D4716-5P									**				
Duct Hose													

12x 8017-9-19.

DQA: _____ Date: _____



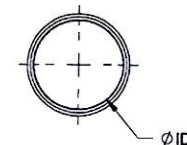
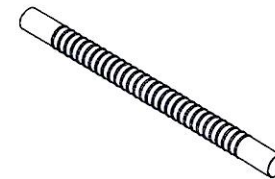
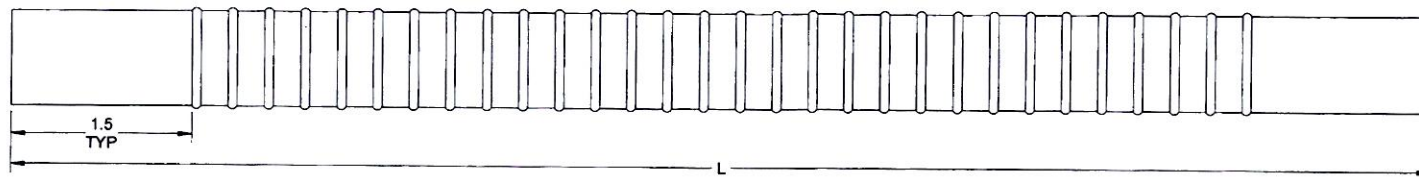
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	ID	L	WEIGHT (lb)
D4716-1	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	24.0	0.2
D4716-3	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	28.0	0.2
D4716-5	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	41.0	0.3

D4716-X DUCT HOSE

NOTES:

- 1) MATERIAL: PER TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: PER TABLE

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 165718 MJS
170830

RELEASE
 2012-11-05
 mp

A	NEW ISSUE	RF	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4716	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DUCT HOSE	NTS
DATE	12.07.25	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37617**

Purchase Order Date 8/30/2017

PO Print Date 8/30/2017

Page Number 1 of 2

Order From :
CUSTOM DUCT
179 BEAVER BERRY ROAD
LIMINGTON, MAINE 04049

VU-CD001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

AUG 31 2017

Contact Name
Vendor Phone 207-637-3000

Ship To Contact
Ship To Phone
Ship Via:
Ship Acct:

Buyer Diane Baker
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable CD Promise Date	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4716-1P As per Dwg D4716 Rev. A B165559	Duct Hose	9/12/2017 Yes 9/12/2017	4.00 Each	\$30.00	\$120.00
Line Total:						\$120.00
2	D4716-3P As per Dwg D4716 Rev. A B165585	Duct Hose	9/12/2017 Yes 9/12/2017	4.00 Each	\$34.00	\$136.00
Line Total:						\$136.00
3	D4716-5P As Per Dwg D4716 Rev. A B165718	Duct Hose	9/12/2017 Yes 9/12/2017	12.00 Each	\$38.00	\$456.00

Note:

8/30/2017

88 17-9-19.

Custom Duct

179 Beaver Berry Rd
 Limington, ME 04049
 PH 1 800 863 2620

Invoice

Date	Invoice #
9/14/2017	2075

Bill To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Ship To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
PO037617	Net 30		9/14/2017	Federal Express		
Quantity	Item Code	Description			Price Each	Amount
12	SCEET	Double Wall SCEET 3 X 41" Your D4716-5P			38.00	456.00
4	SCEET	Double Wall SCEET 3 X 28" Your D4716-3P			34.00	136.00
4	SCEET	Double Wall SCEET 3 X 24" Your D4716-1P			30.00	120.00
	Ship	Shipping Charge Fedex collect			0.00	0.00
SPT-9-19.						
Phone #		Fax #		E-mail		Total \$712.00
207 637 3000		207 637 3000		kinney@fairpoint.net		

Custom Duct
179 Beaver Berry Rd.
Limington, ME 04049

CERTIFICATE OF CONFORMANCE

Customer Name: Dart Aerospace Ltd. Purchase Order No: PO37617

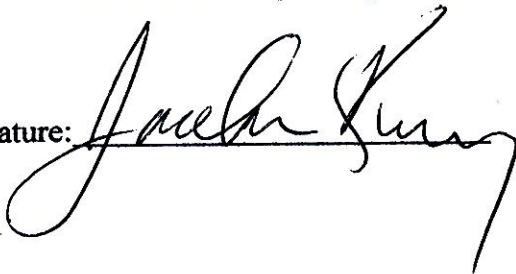
4 EACH SCEET 3 X 24" Your D4716-1P WITH CUFFS

✓ 12 EACH SCEET 3 X 41" Your D4716-5P WITH CUFFS

4 EACH SCEET 3 X 28" Your D4716-3P WITH CUFFS

This is to certify that the products, systems and/or services listed here-in have been manufactured, inspected and tested in accordance with Custom Duct and industry standards. It is further certified that the items listed here-on are in compliance with the provisions of your purchase order/ work order listed above. Inspection and test records and material certifications are on file and available upon request.

Signature:



Date: 14 September 2017